Course Name: CAD/RMS Fundamentals

Course Overview:
This course is offered to provide an overview of Computer Aided Dispatch (CAD) systems and Records Management Systems (RMS) in North America. Led by experts in the field the course will offer insight into design, needs analysis, dispatching, mapping, and integration. Includes class scenarios to reinforce content and further explain the role CAD/RMS in the event of an emergency.

Course Length: 3 days

Who should attend?
- 911, EMS and police dispatchers
- EMA -Emergency Management Agency personnel
- Alarm monitoring and dispatch personnel
- Government agencies, planners, dispatchers, technicians
- Geospatial mapping programmers, technicians and IT support
- Vehicle resource management and logistics dispatchers
- Dispatch supervisors and management personnel
- Dispatch center IT technicians and support personnel
- Dispatch center radio technicians

You will learn:
- CAD/RMS systems
- Dispatching history, alarming and signaling, mapping, building plans
- Record keeping, logging, data base systems
- Types of CAD/RMS applications
- Linking information, databases and organizations
- System layout and architecture
- System analysis and needs requirement
- Mapping systems
- Radio and voice Networks
- Incident management
- Interacting with systems and networks

Prerequisites: Students should bring calculators capable of executing LOG functions for student exercises.

Customizable Course: Yes

Course Content:
Overview of CAD and RMS
- Computer Aided Dispatch
- Records Management System

- Overview provides basic information about current CAD/RMS systems, where the systems fall into the organization, and how the systems benefit a response to an event

Overview of North American CAD/RMS Industry

- Brief Dispatching History in the US
- Alarming and Signaling
- Paging and Messaging
- Mapping and Building Floor Plans
- Record Keeping
- CAD/RMS Systems
- Step-by-step history of dispatching to modern CAD/RMS systems

Types of Applications

- 911 (Emergency calls)
- Police Dispatch
- Fire Dispatch
- Medical/Rescue Dispatch
- Emergency Response
- Government
- Geospatial Mapping (GIS)
- GPS/GRMS
- Vehicle and Resource Management
- Time spent on all the different applications of general CAD/RMS systems

Relationship between CAD and RMS

- Linking information
- Linking databases
- Linking organizations
- Theory and utility of linking different databases (resources, maps, weather, traffic, directions, floor plans, etc.) together to provide uniform dispatch and organized response to an event.
- CLASS SCENARIO: Run class through Event situation – What is needed as far as information is concerned to diagram the need for CAD and reliable RMS. For example: Talk through a scenario where there is a fire. What info do they need to know to properly address the scenario? 5 teams to dispatch and each is in a separate location with separate skills sets. CAD and RMS are needed in this scenario because?

Basic Technology Overview

- System Layout
- Architecture
- Connections
- Security

- Block diagram of CAD systems linked to RMS systems and where the technology fits into current dispatching systems

Database Basics
- Database Theory and Terminology
- Relational Databases
- Demonstration
- Architecture
- Database fundamentals and example of designing a basic database

Implementation and Integration
- Systems Analysis
- Building Relationships
- Needs Requirements
- The nuts and bolts of building CAD/RMS systems to meet certain design specifications.
- CLASS SCENARIO: Needs analysis. Taking a scenario (like the fire in the previous scenario) and using it to tie together the exact needs of each organization involved. What organizations need to share information and what information do they need to share? For example: police, fire, local government, national government, EMS

Mapping Systems
- Overview
- Background of Computer Based Mapping
- Types of Mapping (GIS, Geospatial, Web based...)
- Overview of mapping systems that are a vital part of CAD systems

Responsibilities
- CAD Administrator
- Dispatcher
- Supervisors
- Database Administrators (RMS)
- Break down responsibilities of personnel involved in the support of CAD/RMS systems. List of responsibilities for each job type

PC/Network Recommendations
- Minimum Equipment Needs
- Radio and Voice Networks

Introduction to PCs/Computer Basics
- Desktop Overview (Icons, Task Bars, Navigation...)
- Hardware/Software
- Operating System Concepts (Windows)

- External Devices
- File Organization
- Overview of Basic Programs (E-mail, Word, Excel...)

Taking Calls

- Basic Communication Skills
- Obtaining information
- Recording information
- Dispatching
- Overview of communication skills needed for dispatching and record keeping. Included is an overview of generic forms

Incident Management

- Tracking and Record Keeping
- How does a database entry look and what is included? Date, Time, Location, Personnel, Incident Type
- Reasons for accurate record keeping
- Legal
- Insurance
- Budgeting
- Record Keeping
- Local Laws – What documentation is required, etc. for insurance and disbursement of funds? Refers to agency levels of record keeping and information dispersion to higher up organizational levels

Interaction with other Systems and Networks

- Telephone Networks
- Public Cellular-based Systems
- Computers
- Mobile Devices
- Messaging and E-mail Systems
- Network/Internet
- RF Networks
- Satellite
- Build understanding of integration with current systems and devices, with an emphasis on telephone, cellular, internet, and RF based networks

Interaction with other Dispatch Support Systems

- Haz-Mat
- First Responders
- Police
- Fire
- Medical
- GPS

- Geospatial Mapping (GIS)
- Messaging Systems
- Putting the systems together to form a system to cover complete

CAD/RMS.

- Gathering Information
- Questioning Skills
- Reacting
- CLASS SCENARIO: Practice taking a call and gathering information

Classroom Exercises

- Fill out generic incident form
- Dispatch calls
- Gathering/Recording Information
- Scenario of being on a call – sample call and role play during an incident